Acanthothrips palmi, A New Thrips from Brazil. (Thysanoptera: Phlaeothripidae)

By J. Douglas Hood, Professor of Biology, Emeritus, Cornell University

This species is named after Dr. Charles E. Palm, Director of Research and Director of the Experiment Station at the New York State College of Agriculture at Cornell University, my superior for many years. He has collected Thysanoptera on various occasions, both in the United States and in the American tropics, and has been instrumental in getting material resulting from investigations of banana thrips by the United Fruit Company. The types are in the author's collection.

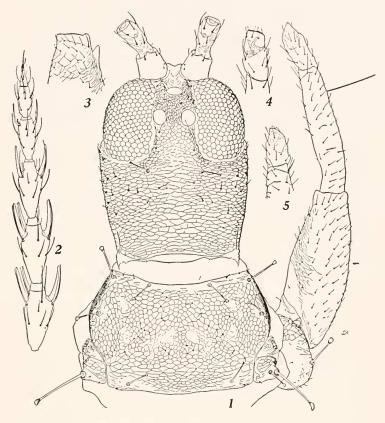
Acanthothrips palmi, sp. nov. (figs. 1-5)

Resembling *nodicornis*, only (among the dark blackish brown species with dark femora), in lacking a white vitta along the sides of the head and prothorax; but differing from that species principally in the presence of a white dash across mesonotum behind middle, the lack of white spots in the fore angles of segments III–VIII of the abdomen, the absence of prominent setigerous tubercles on the cheeks, and the darker, stouter, and much shorter intermediate antennal segments.

Female (macropterous).—Length about 2.8 mm. (fully distended, 3.6 mm.). Color blackish brown, without white markings in head and abdomen, but with a white dash across mesonotum behind middle (this dash is always visible as a pale area in the integument, but the white substance underlying it quickly disappears in preservative); legs blackish brown, with tibiae paler (especially at ends) and tarsi nearly yellow; fore wings lightly washed with brown in anal lobe, along costa to beyond last subbasal seta, in median pocket, and thence along posterior margin to tip; antennae blackish brown, darkest in segments I, II, VII, and VIII, segments III–V dappled with yellow along sides, III sometimes with extreme base of pedicel yellow, IV and V, and sometimes VI, yellow in basal third or more, VII often yellowish at base; internal pigmentation crimson.

Head (fig. 1) typical, its total length about 1.3 times its greatest width across cheeks, 1.4 times that across eyes, and 1.6 times the least width near base, broadest across cheeks at posterior margins of eyes; surface finely polygonally reticulate in ocellar area and along inner margins of eyes, nearly smooth in the deep groove in front of median ocellus, lightly cross-striate with widely-spaced anastomosing lines which form a subreticulation on dorsum and cheeks, the latter thus relatively smooth; cheeks without the usual outstanding tubercles, but with a few pale setae; postocular setae pale brownish, dilated and divided at tip, short $(48-51 \mu)$, about as far apart $(94-100 \mu)$ as their distance from sides of head, arising about 29 μ from eyes. Eyes typical, finely facetted, their dorsal length (in KOH-treated paratype) 155 μ, greatest width 91, least interval (opposite median ocellus) 72, least interval shortly behind posterior ocelli 86. Ocelli of posterior pair slightly in advance of middle of eyes, the median ocellus directed forward and situated distinctly behind front margin of eyes. Antennae (fig. 2) thoroughly typical of the genus, but with the intermediate segments shorter and stouter than usual, segments III-V abruptly narrowed apically in the usual manner and thus urn-shaped, VIII conical and not narrowed at base, the large sense-cones disposed as follows on the inner (and outer) surfaces of the segments: III 1 (2), IV 1 (2), V 1 (1⁺¹), VI 1 (1⁺¹), VII 1 dorsal. Mouth-cone typical, extending fully to posterior margin of prosternum, its length beyond posterior dorsal margin of head $287-308 \mu$.

Prothorax (fig. 1) along median line of pronotum somewhat less than 0.6 the length of head and (inclusive of coxae) more than 2.3 times as wide as long, its surface lightly reticulate throughout, but more closely and distinctly between the posteromarginal setae, the reticles often roughened; major setae all present, dilated and divided at tip, the epimerals pale, others sometimes brownish, antero-marginals 47 μ (54), antero-angulars 62 (67), midlaterals 60 (57), epimerals 113 (111), postero-marginals 65 (62), coxals 63 (63), in the two paratypes. Mesonotum smooth in the pale area crossing it behind



Acanthothrips palmi, sp. nov. (X 141)

- Head and prothorax, paratype; all sculpture and setae shown.
 Segments III-VIII of left antennae, \$\omega\$, paratype.
 Tip of left fore femur, \$\omega\$, holotype.

- 4. Right fore tarsus, inner surface, ♀, paratype.
- 5. Left fore tarsus, dorso-lateral aspect, \(\begin{aligned} \partial \text{paratype.} \end{aligned} \)

middle, subreticulate in remainder, the anterior part with the reticles faintly wrinkled and the faint separating lines with conspicuous raised dots; metanotum with well-developed raised pelta which extends to posterior margin and which is polygonally reticulate throughout, the reticles with faint wrinkles, the separating lines (except at base and narrowly along sides) with raised dots. Legs normal, except that the fore femoral tooth on inner surface near tip may sometimes be wanting (compare figs. 1 and 3); fore femora often more completely sculptured than in specimen used for fig. 1; fore tarsi (fig. 4) with a very small tooth which is pointed when seen in lateral aspect (compare figs. 1, 4, and 5). Wings normal, the fore pair somewhat narrowed at middle because of a prominent up-pocket; the usual four subbasal setae present, I $(50\,\mu)$ close to II and arising posterior to it, II $59-69\,\mu$, III 66-80, IV 87-89; posterior margin with 18-20 accessory hairs.

Abdomen normal, broadest at about segment IV; median tergite of I sector-shaped, with rounded forward point and containing a darker and more heavily sclerotized capstan-shaped area whose posterior margin is narrowly prolonged to sides and thus curved forward, the surface of this median portion lightly polygonally reticulate and minutely longitudinally wrinkled, the more posterior reticles with a few backwardly-directed points; sculpture of rest of abdomen about as usual in the genus; sigmoid wing-retaining setae and the terminal ones dark brown, the others on segments I–IV pale, those on succeeding segments gradually more brownish at base, most of them dilated at tip; setae I and II on IX knobbed, III pointed, their lengths 163, 180, and 210 μ , respectively.

Measurements of female (paratype), in mm., followed (in parentheses) by those of a second (KOH-treated) paratype: Length about 2.8 (2.7), distended, 3.6 (3.6); head, total length 0.365 (0.375), width across eyes 0.266 (0.267), greatest width across cheeks (just behind eyes) 0.280 (0.281), least width in front of basal collar 0.230 (0.234), width across basal collar 0.231 (0.235); prothorax, median length of pronotum 0.210 (0.210), width (inclusive of coxae) 0.487 (0.497); mesothorax, greatest width 0.463 (0.487); fore wings, length 1.29; abdomen, greatest width (at segment IV) 0.497 (0.479); tube (X, only), length 0.224 (0.217), width across basal collar 0.108 (0.110), greatest subbasal width 0.106 (0.108), least apical width 0.059 (0.059), length of terminal setae 0.378 (0.350).

Antennal

segments: H III IVV VI VII VIII Length (μ) : 60 73 115 113 106 77 59 38 (63) (73) (113) (110) (96) (64) (66) (31) 53 53 46 33 26-27 Width (μ) : 58 39

Total length of antenna, 0.641 (0.616) mm.

Male (macropterous).—Essentially like female in color and structure; tarsal tooth larger and arising at a right angle.

BRAZIL: Nova Teutonia, Santa Catarina, July, 1957 (12, holotype; 233, including allotype) and October, 1956 (292, paratypes), collected by Mr. Fritz Plaumann from dead branches.

It is interesting to note that two of the three females, even after one of the fore legs of each was remounted and studied in lateral aspect—one of them after treatment with KOH—show no evidence of a fore-femoral tooth. This tooth, heretofore quite generally looked upon as the most distinctive generic character, thus appears to be of no great importance. There are parallel cases of such variation in allied genera.

A New Lysiopetalid Diplopod from Arizona

By RALPH V. CHAMBERLIN

The milliped genus *Colactis* has been known from some six species occurring in Arizona, one from southern Utah, and one from Lower California. A specimen representing an additional species, here described, was taken by Vincent Roth in Yuma County, Arizona.

Colactis yuma new species

Body cylindrical, proportionately long, and composed in the type of 71 segments.

Eye patch subtrapeziform, the lower margin longer than the upper.